

Abstract

The invention relates to a screw (1) comprising a threaded shank (2) with a force application location (4) for transmitting torque and a screw tip (6). The threaded shank (2) is composed of a shank core (10) and an automatically thread-forming thread (12). The thread (12) is formed as an elevation which extends helically over the shank core (10), is delimited by two flanks (15, 16) which converge in an outer thread edge (14) and has a height (H) measured radially from the shank core (10) to the thread edge (14). The thread (12) has, seen in profile, at the thread edge (14) a specific apex angle (α) formed between the adjacent flanks (15, 16). With preference, at least in a partial region of the thread (12), the outer thread edge (14) extends in a wave form in the radial direction with an amplitude (U) between wave crests (20) with the thread height (H) and wave troughs (22) with a height (h) reduced by the amplitude (U), the thread (12) having, at least in the region of one of its flanks (15/16), in the region of the wave troughs (22) of the thread edge (14) indentations (24) which interrupt the surface of the flank (15/16) and the outer delimitation of which is the thread edge (14). At least one of the two flanks (15, 16) of the thread (12) is formed concavely in the region between the shank core (10) and the thread edge (14), seen in radial profile, in such a way that the apex angle (α) is less than a flank angle (α_F) enclosed between imaginary straight flank lines (FG) determined in each case by a lowest point (GF) of the thread and the thread edge (14). With preference, the thread (12) respectively has in the regions of the wave crests (20) of the thread edge (14) that are not interrupted by indentations (24) the specific, first apex angle (α), formed between the flanks (15/16), and a second apex angle (α'), in the lowest region of the wave troughs (22) of the thread edge (14).

Figures 6 and 7